

TC 4.5 Program Subcommittee Meeting Minutes

Sunday, June 25, 2001
4:00 – 5:00 p.m.

Room 264
Cincinnati Convention Center
Cincinnati, Ohio

Attendees[16]

Dariusz Arasteh/LBNL	Steve Harrison/Queens Univ.
Michel Bernier/Ecole Polytechnic of Montreal	Joe Klems/LBNL
Dragan Curcija/Univ. of Massachusetts	James Krahn/Marvin Windows
François Dubrous/NRCan	Christian Kohler/LBNL
William duPont/LBNL (Chair)	Alex McGowan/Levelton Engineering
Marcia Falke/Keystone Certifications, Inc.	Anil Parekh/NRCan
Howdy Goudey/LBNL	Bipin Shah/NFRC
Arild Gustausen/Norwegian Univ.	John Wright/Univ. of Waterloo

I. Introductions, and Marcia Falke agreed to be secretary

II. Cincinnati Program, June 23-27, 2001

Symposium: "Issues in Window Condensation Resistance", *Anil Parekh/NRCan* {Sunday, 06/24/01, 1:00-3:00 p.m. CC/260-261}

- 1) "Three Dimensional Conjugate Computational Fluid Dynamics Simulations of Internal Window Frame Cavities Validated Using Infrared Thermography", *Arild Gustavsen, Brent Griffith, and Dariusz Arasteh/LBNL*
- 2) "Natural Convection Effects in Three Dimensional Window Frames with Internal Cavities", *Arild Gustavsen, Brent Griffith, and Dariusz Arasteh/LBNL*
- 3) "Rating the Condensation Potential of Windows: Results from Testing and Simulation", *Steve Carpenter & Morgan Hanam/Enermodal Engineering, Ltd.*

Technical Paper (4490) (HVAC&R Research Journal April 2001): "An Interferometric Study of Free Convection at a Window Glazing with a Heated Venetian Blind" *N. Duarte, David Naylor/Ryerson Polytechnic Univ., P.H. Oosthuizen, & S.J. Harrison/Queen's Univ.* {NOT PRESENTING}

Forum: "How to Assess the Performance of Tubular Skylights?", *Hakim Elmahdy/NRC* {Wednesday, 06/27/01, 10:15-11:05 a.m. CC/265}

Forum: "Condensation Resistance of Commercial Fenestration Systems", *Dragan Curcija/Univ. of Massachusetts* {Wednesday, 06/27/01, 11:15-12:05 p.m. CC/265}

Deadlines: Technical Papers were due to ASHRAE on September 29, 2000;
TC 4.5 Symposium Papers were due to Symposium Chairs on September 29, 2000;
All reviewed paperwork with TC Chair signature to ASHRAE: February 9, 2001.

III. Atlantic City Program, January 12-16, 2002

Symposium: "The Effects of Surface Temperature on Window Performance", Chair: *François Dubrous/NRCan*

- 1) "Computer Simulation of Specimens Using THERM"
- 2) "Test of Specimens Using Infrared Temperature Measurements"
- 3) "Influence of Thermal Emittance in the Performance of Laminated Solar Control Glazing"
- 4) "Air Leakage and Condensation Resistance Testing"

Symposium: "Approaches to Evaluating Fenestration", Chair: *Dragan Curcija/Univ. of Massachusetts*

- 1) "Testing Solar Heat Gain in Outdoor Calorimeters in Phoenix, Arizona"
- 2) "Detailed Modeling of Sunlit Venetian Blinds"
- 3) "Simplified Methods of Evaluating Shading Attachments"
- 4) "Simplified Modeling of Cylindrical Skylights"

Seminar: "Issues in Condensation in Commercial Fenestration Systems", Chair: *Jeff Baker/WESTLab*

=> TC 4.5 needs to vote on priority of Atlantic City Sessions at Main Committee Meeting <=

Deadlines: Technical Papers were due to ASHRAE on April 2, 2001;

TC 4.5 Symposium Papers were due to Symposium Chairs on April 2, 2001;

All reviewed paperwork with TC Chair signature to ASHRAE: August 3, 2001.

Submit 1 copy of packet material to ASHRAE (Mary McGee, Meeting Program Administrator)

NOTE: When submitting paperwork to ASHRAE, be sure to include any special requests, i.e., day of the week you need to present or time (i.e., prefer Sunday or Monday). Please also inform your Section 4.0 Program Liaison of this information.

IV. Honolulu Program, June 22-26, 2002

Symposium: "Title Undetermined", Chair: *Hakim Elmahdy/NRC*

- 1) "Update of LBNL Research on Condensation Resistance Evaluation", *Christian Kohler & Dariush Arasteh/LBNL*
- 2) "Computer Simulation of Specimens Using FIDAP", *Dragan Curcija/Univ. of Massachusetts*
- 3) "Test of Specimens Using Infrared Temperature Measurements", *Hakim Elmahdy/NRC*
- 4) "Summary of Phase II Test and Simulation Results", *Jeff Baker/WESTLab*
- 5) "Comparison of Results from the NFRC Solar Heat Gain Research Project", *William duPont/LBNL*
- 6) "Annual Energy Performance of Skylights", *Peter Lyons/Australian Window Assoc.*

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next mtg

Symposium: "Evaluating and Improving Fenestration Frame Performance", Chair: *Bipin Shah/NFRC*

- 1) "Warm Edge Technology", *Hakim Elmahdy/NRC*
- 2) "Correlations for Frame Cavity Heat Transfer Using CFD and 2D Tools", *Christian Kohler, Arild Gustavsen, Brent Griffith, and Dariush Arasteh/LBNL*
- 3) "Solar Heat Gain Coefficient Calculations for Frames Using 2D FEA Tools", *Christian Kohler/LBNL and Dragan Curcija/Univ. of Massachusetts*
- 4) "The Effect of the Well on Skylight Solar Heat Gain", *Joe Klems/LBNL*
- 5) "Glass Plate Curvature Effects on U-values of Windows", *Stephane Halle & Michel Bernier/Ecole Polytechnic*

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Honolulu Program, June 22-26, 2002 (*Continued*)

Symposium: "Improvements in Computer Modeling Fenestration Performance", *Chair: Peter Lyons/Australian Window Assoc.*

1) "Variable-h Model for Improved Prediction of Surface Temperature in Fenestration Systems", *Dragan Curcija and Yie Zhao/Univ. of Massachusetts*

2) "Use of Detailed Radiation Modeling in Predicting Heat Transfer of Fenestration Systems", *Dragan Curcija/Univ. of Massachusetts*

3) "Calculation of Condensation Resistance Indices Using Computer Modeling Tools", *Dragan Curcija/Univ. of Massachusetts and Bipin Shah/NFRC*

4) "Results and Lessons of NFRC Round Robin Testing and Simulations", *Bipin Shah, Dan Wise/NFRC and Dragan Curcija/Univ. of Massachusetts*

Seminar: "Specifying the Right Windows for Your Job", *Chair: Franr;ois Dubrous/NRCan ---"*

Deadlines: Technical Papers are due to ASHRAE on September 28.2001; TC 4.5
Symposium Papers are due to Symposium Chairs on September 28.2001; All reviewed
paperwork with TC Chair signature to ASHRAE: February 8. 2002.

V. Adjourn

Respectively Submitted: Marcia Falke/Keystone Certification, Inc.